

2007 INTERNAL REVIEW: Nutrition and Healthier Food Choices Portfolio for FY 2006

I. Background

This document was prepared in May 2007 as the internal review of the Nutrition and Healthier Food Choices portfolio for Fiscal Year 2006. It contains updates to the portfolio, responses to the comments of the external panel review and changes to criteria scores with accompanying justifications. This document is a result of the efforts of the National Program Leaders in collaboration with CSREES' Office of Planning and Accountability (OPA) staff.

- **The following knowledge areas (KAs) are included in Portfolios 5.1 and 5.2 which is now known as the Nutrition and Healthier Food Choices Portfolio**
 - 701: Nutrient Composition of Food
 - 702: Requirement and Function of Nutrients and Other Food Components
 - 703: Nutrition Education and Behavior
 - 704: Nutrition, Hunger and Food Security in the Population
- **Portfolio reviews:**

External Review: February, 2006 Score: 86

Internal review: May, 2007 Score: 90

The Nutrition and Healthier Food Choices Portfolio received an overall score of 86 from the external expert panel in the 2006 PREP and a score of 90 for the annual internal assessment conducted in May 2007. The table below shows the breakdown of scores for different questions and criteria.

Relevance	External panel score February 2006	Internal score for FY 2007
Scope	2	2.5
Focus	3	3
Contemporary and/emerging issues	3	3
Integration	2	2
Multi-disciplinary balance	2	2
Quality		
Significance of findings	3	3
Stakeholder/Constituents inputs	3	3
Alignment with current state of science	3	3
Appropriate/cutting methodologies	3	3
Performance		
Portfolio productivity	2	2
Portfolio comprehensiveness	2	2.5

Portfolio timeliness	3	3
Agency guidance	3	3
Portfolio accountability	2	2
Score	86	90

- **A brief summary of the PREP report with the panel's specific recommendations:**

The panel found that the people of CSREES Family, 4-H and Nutrition make a significant difference and add considerable value to the work of both the agency and the partnership. The evidence presented in this portfolio reflects hard work and indicates high levels of productivity. There is evidence of increasing emphasis on integration and that CSREES staffs are becoming more creative and determined about planning and reporting as forms of accountability.

The panel recommends continued effort in partnerships with 1890 and 1994 institutions. Many opportunities exist for programming on critical issues, expanding urban track issues and the issue of wildlife-urban interface. National needs can often be met by working in international collaborations and contexts.

The panel suggests that the partnership continue to expand interactions with stakeholders to include "emerging stakeholders." It is as important for planning processes to identify new stakeholders and partners as it is for the process to identify emerging issues and priorities. Further, players throughout the partnership should examine all federal reports across states within program areas in order to document the synergistic effect of integrated funding on levels of research, education and extension productivity.

There is a need to standardize and expand the documentation and evaluation metrics across program areas and increase the archiving and accessibility of research project data (in the CRIS and other systems). This is necessary in order to permit meta-analysis of the data.

The panel recommends training on the logic model for agency employees and external and internal partners. Instead of just evaluating past performance, the panel also suggests developing strategic plans for each problem area and increasing stakeholder contributions by including panel members and other stakeholders in the development and review of CSREES strategic plans at the portfolio level.

Finally, the panel suggests increasing the documentation of outcomes. Formative evaluations to document program implementation successes and challenges should be performed.

II. CSREES response to PREP recommendations that cross all portfolios

In response to directives from the Office of Management and Budget (OMB) of the President, CSREES implemented the Portfolio Review Expert Panel (PREP) process to systematically review its progress in achieving its mission. Since this process began in 2003, fourteen expert review panels have been convened and each has published a report offering recommendations and guidance. These external reviews occur on a rolling five-year basis. In the four off years an internal panel is assembled to examine how well CSREES is addressing the expert panel's recommendations. These internal reports are crafted to specifically address the issues raised for a particular portfolio; however, despite the fact that the expert reports were all written

independent of one another on portfolios comprised of very different subject matter, several themes common to the set of review reports have emerged. This set of issues has repeatedly been identified by expert panels and requires an agency-wide response. The agency has taken a series of steps to effectively respond to those overarching issues.

Issue 1: Getting Credit When Credit is Due

For the most part panelists were complimentary when examples showing partnerships and leveraging of funds were used. However, panelists saw a strong need for CSREES to better assert itself and its name into the reporting process. Panelists believed that principal investigators who conduct the research, education and extension activities funded by CSREES often do not highlight the contributions made by CSREES. Multiple panel reports suggested CSREES better monitor reports of its funding and ensure that the agency is properly credited. Many panelists were unaware of the breadth of CSREES activities and believe their lack of knowledge is partly a result of CSREES not receiving credit in publications and other material made possible by CSREES funding.

Issue 1: Agency Response:

To address the issue of lack of credit being given to CSREES for funded projects, the Agency implemented several efforts likely to improve this situation in 2005.

First it developed a standard paragraph about CSREES's work and funding that project managers can easily insert into documents, papers and other material funded in part or entirely by CSREES.

Second, the Agency is in the process of implementing the "One Solution" concept. One Solution will allow for the better integration, reporting and publication of CSREES material on the web. In addition, the new Plan of Work (POW), centered a logic model framework, became operational in June 2006. The logic model framework is discussed in more detail below. Because of the new POW requirements and the POW training conducted by the Office of Planning and Accountability (also described in more detail below), it will be simpler for state and local partners to line up the work they are doing with agency expenditures. This in turn will make it easier for project managers to cite CSREES contributions when appropriate.

Issue 2: Partnership with Universities

Panelists felt that the concept of partnership was not being adequately presented. Panelists saw a need for more detail to be made available. Questions revolving around long-term planning between the entities were common as were ones that asked how the CSREES mission and goals were being supported through its partnership with universities and vice versa.

Issue 2: Agency Response:

CSREES has taken several steps to strengthen its relationship with university partners. First, to the extent possible, implementing partners will be attending the CSREES strategic development exercise which is intended to help partners and CSREES fully align what is done at the local level. Second, CSREES has realigned the state assignments for its National Program Leaders (NPLs). Each state is now assigned to two specific NPLs. By reducing the number of states on which any individual NPL is asked to concentrate and assigning and training NPLs for this duty, better communication between state and NPLs should occur. Finally, several trainings that focused on the POW were conducted by CSREES in geographic regions throughout the country. A major goal of this training was to better communicate CSREES goals to state leaders which will facilitate better planning between the universities and CSREES.

Issue 3: National Program Leaders

Without exception the portfolio review panels were complimentary of the work being done by NPLs. They believe NPLs have significant responsibility, are experts in the field and do a difficult job admirably. Understanding the specific job functions of NPLs was something that helped panelists in the review process.

Panelists did however mention that often times there are gaps in the assignments given to NPLs. Those gaps leave holes in programmatic coverage.

Issue 3: Agency Response:

CSREES values the substantive expertise that NPLs bring to the Agency and therefore requires all NPLs to be experts in their respective fields. Given the budget constraints often times faced by the agency, the agency has not always been able to fund needed positions and had to prioritize its hiring for open positions. In addition, because of the level of expertise CSREES requires of its NPLs, quick hires are not always possible. Often, CSREES is unable to meet the salary demands of those it wishes to hire. It is essential that position gaps not only be filled but that they be filled with the most qualified candidate.

Operating under these constraints and given inevitable staff turnover, gaps will always remain. However, establishing and drawing together multidisciplinary teams required to complete the portfolio reviews has allowed the Agency to identify gaps in program knowledge and ensure that these needs are addressed in a timely fashion. To the extent that specific gaps are mentioned by the expert panels, the urgency to fill them is heightened.

Issue 4: Integration

Lack of integration has been highlighted throughout the panel reviews. While review panelists certainly noted in their reports where they observed instances of integration, almost without fail panel reports sought more documentation in this regard.

Issue 4: Agency Response:

Complex problems require creative and integrated approaches that cut across disciplines and knowledge areas. CSREES has recognized the need for these approaches and has undertaken steps to remedy this situation. CSREES has recently mandated that up to twenty percent of all NRI funds be put aside specifically for integrated projects. These projects cut across functions as well as disciplines and ensure that future Agency work will be better integrated. Finally, integration is advanced through the portfolio process which requires cooperation across units and programmatic areas.

Issue 5: Extension

While most panels seemed satisfied at the level of discussion that focused on research, the same does not hold true for extension. There was a call for more detail and more outcome examples based upon extension activities. There was a consistent request for more detail regarding not just the activities undertaken by extension but documentation of specific results these activities achieved.

Issue 5: Agency Response:

Outcomes that come about as a result of extension are, by the very nature of the work, more difficult to document than the outcomes of a research project. CSREES has recently shuffled its strategy of assigning NPLs to serve as liaisons for states. In the past, one NPL might serve as a liaison to several states or a region comprised of states. Each state will be assigned a specific NPL and no NPL will serve as the lead representative to more than two states. This will ensure more attention is paid to extension activities.

In addition CSREES also has been in discussion with partners and they have pledged to do their best to address this issue. The new POW will make extension-based results and reporting a priority. Placing heavy emphasis on logic models by CSREES will have the effect of necessitating the inclusion of extension activities into the state's POWs. This, in turn, will require more reporting on extension activities and allow for improved documentation of extension impact.

Issue 6: Program Evaluation

Panelists were complimentary in that they saw the creation of the Office of Planning and Accountability and portfolio reviews as being the first steps towards more encompassing program evaluation work; however,

they emphasized the need to see outcomes and often stated that the scores they gave were partially the result of their own personal experiences rather than specific program outcomes documented in the portfolios. In other words, they know first hand that CSREES is having an impact but would like to see more systematic and comprehensive documentation of this impact in the reports.

Issue 6: Agency Response:

The effective management of programs is at the heart of the work conducted at CSREES and program evaluation is an essential component of effective management. In 2003 the PREP process and subsequent internal reviews were implemented. Over the past three years fourteen portfolios have been reviewed by expert panel members and each year this process improves. NPLs are now familiar with the process and the staff of the Planning and Accountability unit has implemented a systematic process for pulling together the material required for these reports.

Simply managing the process more effectively is not sufficient for raising the level of program evaluations being done on CSREES funded projects to the highest standard. Good program evaluation is a process that requires constant attention by all stakeholders and the agency has focused on building the skill sets of stakeholders in the area of program evaluation. The Office of Planning and Accountability has conducted training in the area of evaluation for both NPLs and for staff working at Land-Grant universities. This training is available electronically and the Office of Planning and Accountability will be working with NPLs to deliver training to those in the field.

The Office of Planning and Accountability is working more closely with individual programs to ensure successful evaluations are developed, implemented and the data analyzed. Senior leadership at CSREES has begun to embrace program evaluation and over the coming years CSREES expects to see state leaders and project directors more effectively report on the outcomes of their programs as they begin to implement more rigorous program evaluation. The new POW system ensures data needed for good program evaluation will be available in the future.

Issue 7: Logic Models

Panelists were consistently impressed with the logic models and the range of their potential applications. They expressed the desire to see the logic model process used by all projects funded by CSREES and hoped not only would NPLs continue to use them in their work but, also, that those conducting the research and implementing extension activities would begin to incorporate them into their work plans.

Issue 7: Agency Response:

Logic models have become a staple of the work being done at CSREES and the Agency has been proactive in promoting the use of logic models to its state partners. Two recent initiatives highlight this. First, in 2005, the POW reporting system into which states submit descriptions of their accomplishments was completely revamped. The new reporting system now closely matches the logic models being used in portfolio reports. Beginning in fiscal year 2007, states will be required to enter all of the following components of a standard logic model. These components include describing the following:

- Program Situation
- Program Assumption
- Program Long Term Goals
- Program Inputs which include both monetary and staffing
- Program Output which include such things as patents
- Short Term Outcome Goals
- Medium Term Outcome Goals
- Long Term Outcome Goals
- External Factors
- Target Audience

The system is now operational and states were required to begin using it by June of 2006. By requiring the inclusion of the data components listed above states are in essence, creating a logic model that CSREES believes will help improve both program management and outcome reporting. Please note a sample logic model has been included in Appendix A.

The second recent initiative by CSREES regarding logic models concerns a set of training sessions conducted by Planning and Accountability staff. In October and November of 2005 four separate training sessions were held in Monterrey, California, Lincoln, Nebraska, Washington D.C. and Charleston, South Carolina. More than 200 people representing land-grant universities attended these sessions where they were given training in logic model creation, program planning, and evaluation. In addition, two training sessions were provided to NPLs in December 2005 and January 2006 to further familiarize them with the logic model process. Ultimately it is hoped these representatives will pass on to others in the Land-Grant system what they learned about logic models thus creating a network of individuals utilizing the same general approach to strategic planning. These materials also have been made available to the public on the CSREES website.

II. National Program Leader's response to PREP recommendations regarding the Nutrition and Healthier Food Choices portfolios

The team responsible for the Food and Nutrition Portfolios recognize that self assessment and evaluation is critical and should be an on-going process. As such, the team seriously considered the analysis and recommendations provided by the external review team for the Nutrition and Healthier Food Choices portfolio and reported in February 2006. The nutrition portfolio team representing CSREES professionals from Families, 4-H, and Nutrition (F4-HN), Competitive Programs-Research, and Competitive Programs-Integrated and a liaison from OPA identified the following set of issues that were specifically raised within the 2006 external portfolio review, reviewed accomplishments and activities during FY 2006 and prepared the following set of responses. Members of the 2007 the Nutrition and Healthier Food Choices portfolio team include:

Stephanie	Blake	F4-HN
Helen	Chipman	F4-HN
Shirley	Gerrior	F4-HN
Etta	Saltos	Competitive Programs-Research
Marilyn	Swanson	F4-HN
Edith	Thomas	F4-HN
Dionne	Toombs	Competitive Programs-Integrated Programs
Elizabeth	Tuckermanty	Competitive Programs-Integrated Programs
Cynthia	Tuttle	F4-HN
Susan	Welsh	F4-HN
Djimé	Adoum	P & A Liaison
Mary	Gray	Deputy Administrator

A summary of the external and internal score is shown below.

Relevance	External panel score February 2006	Internal score for FY 2006
Scope	2	2.5
Focus	3	3
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Stakeholder/Constituents inputs	3	3
Alignment with current state of science	3	3
Appropriate/cutting methodologies	3	3
Performance		
Portfolio productivity	2	2
Portfolio comprehensiveness	2	2.5
Portfolio timeliness	3	3
Agency guidance	3	3
Portfolio accountability	2	2

Relevance

1.1 Scope

The panel recognizes the intrinsic dilemma and difficult tradeoffs that would be needed to achieve exceptional coverage in all areas implied by the portfolio's goals and objectives (scope) and achieving a highly focused approach that addresses critical issues, topics and critical needs (focus).

This portfolio reflects this unit's strength in addressing preventive health and well-being of individuals, families and communities. The food and nutrition needs of young children and their families and communities are targeted with EFNEP and other CES programs, community food projects and maternal and child health (MCH) programs.

Recommendation

The panel recommends that food and nutrition needs of older adults be addressed with more emphasis within the unit's resource limitations. In addition, further efforts are needed to clarify relationships among base programs, initiatives, and targeted programs in the extension/outreach area. The panel recommends that the unit clarify these relationships in the context of optimal integration of research, education and extension, rather than categories based on separate funding lines such as EFNEP, community food programs, etc.

Actions

Research, education and Extension/outreach programs that are not specifically targeted to children, teens or young adults usually target all adults. Among formula funded research projects, nine current KA 702 and five KA 703 projects specifically target older people. There are nineteen current NRI competitively funded projects that focus on all or older adults. One Multistate Research Fund project which targets older adults, “Improving Plant Food (Fruit, Vegetable and Whole Grain) Availability and Intake in Older Adults,” involves 18 researchers at 10 universities. Approximately 80 percent of the Cooperative Extension System provides various educational programs for the elderly. These programs include specified nutrition advice for a healthy lifestyle, sessions regarding finances, and lists of community resources for the elderly and their care givers. In addition to programmatic efforts specifically addressing nutritional aspects of aging, this work is well-integrated with KA 802, human development and family well-being. Efforts to address rural aging are approached in a holistic manner utilizing the strengths of other programs while targeting challenges unique to the rural lifestyle. The EFNEP is targeted to low income people in specified communities although most participants tend to be families with children and low income youth. There is increasing effort to integrate EFNEP into other Extension programming efforts. Recent increases in Federal appropriations has allowed 1890 involvement.

1.2 Focus

The panel rated the portfolio as highly focused. In general, this portfolio reflects an appropriate mix of efforts to address important needs (e.g., obesity emphasis in supported research and EFNEP). Overall, further benefits may be achieved by more extensive coordination as the unit strives to allocate its resources in a synergistic way that addresses important issues, topics and critical needs.

The panel noted that efforts to focus agency programs need to be balanced with the need to address broad issues with a comprehensive plan.

Recommendation

Therefore, the unit is advised to continue to prioritize its efforts without jeopardizing its ability to be flexible and responsive to dynamic food, nutrition and health issues.

Actions

Because of the seriousness of the obesity epidemic, its multidisciplinary nature and the multifaceted strengths and expertise of the CSREES partners to address it, a major focus of the nutrition portfolio continues to be obesity prevention. Underlying the focus of obesity prevention is the recognition that weight maintenance and obesity prevention are the basis for a healthy lifestyle. Our emphasis uses an integrated, food systems approach and involves the land grant university system, the communities they serve, and collaborative effects with Federal and private partners. Related efforts are responsive to obesity prevention through effective research and educational invention strategies but flexible enough to encompass overarching food, nutrition, and health issues to improve the nation’s nutritional health. Specific details are described under actions in section 3.1

1.3 Contemporary and/or Emerging

Many contemporary and emerging food and nutrition issues have been identified in this portfolio. In fact, there are over 30 statements of future direction in the portfolio.

Recommendation

While the panel applauds CSREES' ambitious plans and efforts, it recommends that the future directions be prioritized to further enhance integration of research, education and extension activities. Additionally, the panel believes that renewed/strengthened energy and commitment are needed to enhance this unit's ability to adapt as issues emerge and continue to evolve.

Actions

Actions to enhance, support and integrate research, education and extension in support of the CSREES strategic goal to "Improve the Nation's Nutrition and Health" as well as the emerging issue of obesity prevention are crosscutting and multifaceted. They maintain the flexibility and responsiveness of this Portfolio in several significant ways:

- ❖ Capitalizing on the synergy gained by strengthening coordination among the various CSREES programs to focus on obesity has resulted in both the SBIR and the National Needs Fellowship Grants specifically citing obesity in recent RFAs. In 2006, the Fellowship Grant received about 10 percent of the eligible applications in the diet and obesity area with awards being made to three of these out of a total of 29 awards. In addition, through the Obesity Task Force, CSREES representatives and Land Grant university partners come together to think strategically about obesity prevention and encourage obesity focus across programs.
- ❖ Working to integrate and coordinate efforts focused on the nation's health and obesity prevention has lead to the funding of three new integrated Multistate Research Funded projects: NC1028: "Promoting healthful eating to prevent excessive weight gain in young adults" which involves 11 states and W1005: "An integrated approach to prevention of obesity in high risk families" which involves 18 states and the District of Columbia; and NCDC211: "EFNEP Related research and outreach" which involves 15 states and the District of Columbia. In particular, the EFNEP project for the first time addresses research questions associated with the successful EFNEP and brings together the Extension and research communities to work together towards validation of EFNEP's outcome measures.
- ❖ Sponsoring research, education and extension projects through the National Research Initiatives on Bioactive Food Components and Human Obesity titles. For 2006, 118 proposals were submitted under Bioactive Food Components with 21 awarded; 82 proposals were submitted under Human Nutrition with 11 grants and 5 bridge grants awarded.
- ❖ Addressing broad issues within a comprehensive plan focused on obesity prevention is effectively done within the Land Grant University System. For 2006-07, 126 human obesity research projects were identified in CRIS. These projects bring together multiple disciplines towards a better understanding of the behavioral and environmental factors as well as the strength of the CES to develop and evaluate effective interventions.

1.4 Integration

There has been a push for integrated projects at the federal level, especially within the NRI project priorities and AREERA, but that is not consistently reflected in this unit's structural and management functions, especially for formula fund programs that are managed mainly at the

state/university level. The NRI and other research activities have provided evidence of supporting integrated projects.

Recommendations

Further efforts to translate research findings to strengthen work in the education and extension mission areas are recommended.

Integration of research, education and extension across all levels is critical to fulfilling accountability expectations for the unit. This unit is in a position to create synergy and multi-disciplinary balance, and the unit's emphasis on integration should continue to be emphasized.

Actions

CSREES requires annual Plans of Work and Progress Reports from land-grant universities which are reviewed by CSREES state liaisons. One of the review criteria is that there be evidence of adequate stakeholder input in the development of formula funded research and Extension/outreach plans. The competitively awarded NRI program uses various means of collecting stakeholder input including an open solicitation through the RFA development process and focused listserv requests and also formal reports such as those on research needs from the Institute of Medicine and the Dietary Guidelines Advisory Committee

CSREES is working with other USDA agencies in support of the Dietary Guidelines for American, 2010 revision. Strategies are being discussed as to roles and responsibilities among the various USDA agencies to support an evidence-based system approach. NPLs' research expertise as well as CES faculty and staff community outreach and educational experience using the Dietary Guidelines and MyPyramid uniquely position CSREES/CES to understand evidence-based research related to DG development and implementation.

1.5 Multi-disciplinary Balance

Historically, nutrition education research has tended to focus on individual behavior change, but programs function at the community and policy levels as well, and each of these components is critical for effective change. Practitioners can help inform researchers to strengthen and enhance the coordination of these functions. Multidisciplinary models, as reflected in the community nutrition education logic models, can be borrowed from public health and other partners (e.g., translational research emphasis of NIH) to accomplish this broader range of multidisciplinary research needs. This will help differentiate USDA's and CSREES's niche in the broad food/nutrition/health research arena and capitalize on this unit's linkages to the land grant university system, the nationwide network of county and state Extension programs, and agency expertise that spans all aspects of the nation's food system.

Recommendation

The community food program and NRI research projects have made significant progress in incorporating multidisciplinary priorities. Similarly, some education and extension programs have multidisciplinary components (e.g., food resource management, food security). Wherever possible, further multidisciplinary work should be encouraged throughout the unit.

Actions

Collaborating with other agencies and organizations, both public and private to maximize financial resources and cross level expertise is ongoing and offers the potential for promising and sustained outcomes related to the nutrition portfolio. CSREES is an active member of the Interagency Federal Collaborative on Research Efforts to Eliminate Health Disparities. Organized by CDC this is a unique effort to bring together Federal agencies to identify research and collaborative strategies to enhance efficiency and effectiveness in improving health outcomes. Currently, CSREES is involved with work related to developing a systems approach for addressing obesity and exploring opportunities for recognition within the Collaborative funding mechanism hosted by NIH. This Collaborative provides the potential for joint NIH/CSREES RFAs and PI meetings in the future.

CSREES has effectively sought and entered into Partnerships with both Federal and private partners to increase physical activity as a part of the obesity prevention focus. Many of these partners have mission areas or an emphasis that aligns with the CSREES strategic goal to improve national nutrition and health. Partnerships expand CSREES' area of influence in this regard and have the potential to leverage resources. Three partnerships are in place with: CDC's "Steps to a HealthierUS"; the Federal Public Health and Recreation Working Group; and "America On The Move" Foundation. The Interagency MOU for the Federal Public Health and Recreation Working Group includes a cross-sectional representation from various federal agencies with opportunities to leverage funds and resources to promote outdoor recreational research and education for healthy living. The MOU with the "America On The Move" has the potential to provide CES staff at the state and local levels the ability to design and complete evaluation component for walking programs.

The Community Food Programs are another example of programs that have a multi-disciplinary nature. The essence is solving problems that involve food access, the food environment, economic and social justice and environmental stewardship. Applicants who successfully incorporate all aspects of community problem solutions typically are the awardees for this program.

Quality

2.1 Significance of Findings

NRI and other CSREES-sponsored research programs have yielded an impressive number of publications in a breadth of high-quality peer-reviewed journals.

Recommendation

Specifically the list for Nutrition and Healthier Food Choices Portfolio (pages 98-101) along with the 2000-2004 publications from the EFNEP report (and pages 148-151 of the portfolio self-review document) provide evidence of significant findings that have been shared with professional colleagues.

Actions

Nutrition and Healthier Food Choices Portfolio continues to demonstrate significant findings. The Expanded Food and Nutrition Education Program (EFNEP) has a strong history of program success. Much of this relates to having a foundation in research. EFNEP Research Studies: 1989 – 2006 is

an evolving document which sites significant research conducted on EFNEP over the years. Publications from 2006 include:

Montgomery, S. & Willis, W. Fiscal Year 2005 Impact and Review of the Expanded Food and Nutrition Education Program. May 2006.

Townsend, M., et al. Evaluation of a USDA Nutrition Education Program for Low-Income Youth. *Journal of Nutrition Education and Behavior*, 38(1):30-41, 2006.

Townsend, M., et al. Evaluating Food Stamp Nutrition Education: Process for Development and Validation of Evaluation Measures. *Journal of Nutrition Education and Behavior*, 38(1):18-24, 2006.

Townsend, M. Obesity in Low-Income Communities: Prevalence, Effects, a Place to Begin. *Journal of the American Dietetic Association*, 106(1):34-37, 2006.

Townsend, M., et al. Food Behavior Checklist Effectively Evaluates Nutrition Education. *California Agriculture*, 60(1):20-24, 2006.

The EFNEP Research Committee will be evaluating this document to ensure that all publications have been cited and that new publications continue to be added. This document is available at http://www.csrees.usda.gov/nea/food/efnep/pdf/research_studies.pdf.

2.2 Stakeholder/Constituent Inputs

The panel commends the unit for soliciting input from a variety of stakeholders and constituents. However, on the formula side, states give input that does not appear to be routinely used to set and adjust program directions. Additionally, the panel noted that although EFNEP is a highly effective program with a carefully structured reporting system, it lacks a systematic planning mechanism for responding to input from researchers and practitioners.

Recommendation

The panel believes that more emphasis should be given to application of stakeholder suggestions, as this is important to maintaining quality and stakeholders' appreciation of their value in the overall partnership.

Actions

Stakeholders are in a unique position to inform CSREES of their needs and interests and CSREES has made painstaking efforts to develop mechanisms for soliciting and implementing input. For example, CSREES obtains input from state partners through the NPL liaisons program, through teleconferencing and during national nutrition conferences. Stakeholder information is utilized in planning and implementing CSREES sponsored conferences, planning innovative programs, as well as, feedback at the termination of a program. This effort helps ensure that stakeholders appreciate their value in the partnership.

On the formula side, EFNEP routinely solicits stakeholder input. One example of this is the use of advisory committees. This past year EFNEP released the new Nutrition Education Evaluation and

Reporting System version 5 (NEERS5) software used to manage and evaluate programming efforts. Several advisory committees were formed to assess the needs of the users, review the software and revise the output reports. These committees are comprised of EFNEP coordinators and staff from across the United States who work together and with the National Office to make informed recommendations and decisions. The direct results of their input continue to be evidenced in the updates to the NEERS5 software as well as the EFNEP website. This collaborative effort provides concrete evidence of the benefits of working with stakeholders and program participants. Additionally, with the inclusion of the 1890 institutions to the EFNEP program this past year there was a need expressed for additional guidance. An 1890s Advisory Committee was recently formed with membership from CSREES, 1890 and 1862 Land Grant Universities to provide support for these institutions as well as a mechanism for the system to work together to support each other.

The community Food Program has established a funding stream for small planning grants based on stakeholder input. This encourages small grants to begin planning, assessment and forming collaborations in the new communities.

Land Grant universities are in the process of writing a proposal for a 5 year multi-state project for EFNEP. During this time a group of EFNEP professionals will work together with researchers and other practitioners to review program methodologies. Their work is expected to inform the National office as well as bridge the gap between extension, research and education.

CSREES requires annual Plans of Work and Progress Reports from land-grant universities which are reviewed by CSREES state liaisons. One of the review criteria is that there be evidence of adequate stakeholder input in the development of formula funded research and Extension/outreach plans. The competitively awarded NRI program uses various means of collecting stakeholder input including an open solicitation through the RFA development process and focused listserv requests and also formal reports such as those on research needs from the Institute of Medicine and the Dietary Guidelines Advisory Committee. As a result in the most recent RFA related to obesity prevention efforts, emphasis was placed on family relationships as a factor affecting obesity. Copies of stakeholder input provided to CSREES for competitive programs in the areas of food, nutrition and health can be found at:

http://www.csrees.usda.gov/business/reporting/stakeholder/fo_stakeholder.html.

2.3 Alignment with Current State of Science

The agency has invested significant resources and made a concerted effort to adjust educational materials and messages to be consistent with the Dietary Guidelines for Americans, the current and appropriate basis for educational messages according to Federal policy.

2.4 Appropriate and/or Cutting Edge Methodology)

The panel noted evidence showing that appropriate methodology is routinely applied. For example, NRI research grant proposals are selected according to criteria including novelty, innovation, uniqueness, and originality. The panel is pleased to note that EFNEP's reporting system is being updated to reflect current research in behavior and impact measurement. The agency's work to develop logic models has been recognized by GAO and other experts as an appropriate methodology. This unit appears to be ahead of other units in utilizing this planning and reporting tool. The comprehensive CNE logic model and this portfolio's Goal 4 logic model provide a well-

developed foundation for development of a coordinated set of nested logic models that can clarify each program's role in achieving the unit's overall food and nutrition goals.

Performance

3.1 Portfolio Productivity

Overall portfolio productivity was difficult to assess given that this portfolio reflects a variable mix of effectiveness in terms of CSREES staff efforts in providing services through funding, directing, managing and partnering with its various stakeholders. For example, the diabetes and obesity CES projects/initiatives reflected contributions that stemmed mainly from work in states (CA and WA) with weaker evidence of leadership or significant contributions from this unit. On the other hand, this unit's contributions to the documented outcomes of research activities are well supported in the portfolio. Because of this variability among programs, the panel rated the overall portfolio as moderately productive.

3.2 Portfolio Comprehensiveness

The panel's ability to judge evidence of outcomes related to the portfolio's goals is limited because the agency appears to be responsible for activities (e.g., formula funded programs and FSNE) conducted with funds that they administer but often are managed by a system that is beyond their immediate control. Additionally the reporting system has limited potential to consistently capture and aggregate output/outcomes data.

The agency is making efforts to utilize a consistent system based on logic models and the panel strongly supports these efforts but would like to see CSREES take the next step. The current models were developed retrospectively and it was difficult to determine how the individual models fit together.

Recommendation

The panel encourages the development of a comprehensive logic model for the unit so that programmatic logic models can be developed in support of and nested within the larger logic model.

Actions

The panel identified the Community Nutrition Education (CNE) Logic Model and Portfolio Goal 4 Logic Model as a "well-developed foundation" for establishing a coordinated set of nested logic models that can clarify program roles in achieving unit goals. Building upon this foundation, Version 2 of the CNE Logic Model has been pilot-tested with FSNE and other nutrition education programs. This model, which was developed by researchers, program managers, and evaluation specialists under CSREES leadership, was cited in a recently published college text, as an example of designing evaluation for theory-based nutrition education. (Isobel R. Contento, Nutrition Education, Linking Research, Theory, and Practice, Jones and Bartlett Publishers, Inc., 2007; pp. 366-367). An online program planning and reporting system, developed in conjunction with the CNE Logic Model, was used to collect fiscal year 2005 data from university-based Food Stamp Nutrition Education (FSNE) programs and networks. Further development of this online system for other nutrition programs is underway.

Other actions to inform the development of a comprehensive unit model include the review of accomplishment reports from universities by National Program Leaders and Office of Planning and Accountability staff and preliminary discussion as to how existing program management and reporting systems can be realigned using a more comprehensive and holistic approach. Lessons learned in working with the recently formed North Central Development Committee (NCDC) 211, that is developing a multi-state research proposal on “EFNEP Related Research and Outreach” will inform integration of research and program elements of the unit model.

3.3 Portfolio Timeliness

CSREES competitive grants are administered with a process (CRIS reports) that encourages timely completion of projects. CES and other formula-funded projects are ongoing and less amenable to completion-oriented reports that would provide strong evidence related to this indicator of productivity.

Recommendations

The panel recommends that CSREES continue to work with its partners and key stakeholders in improving its ability to collect important outcomes data via a system that respects local differences in needs and resources.

Actions

CSREES continues to use the Current Research Information System, CRIS, to track progress of projects and assure that activities and accomplishments proceed according to proposed and approved timeframes. Additionally, an annual extensive review of all projects with a potential nutrition emphasis is completed by a NPL in human nutrition as to timeliness and focus. Obesity prevention related projects are flagged and further coded for specifics to biochemical, behavioral and food science research related to obesity. Attention to Extension education activities as a component of this research is coded as well. Even though CES projects are more difficult to track, formula-funded projects which have an Extension/education component or emphasis are included in CRIS in this way. Also, NPLs continue to monitor State Plans of Work and Annual Plans to determine the timely submission of reported outcomes. This state-Federal feedback system is used to make adjustments as needed to keep nutrition and related projects/activities progressing in a timely manner.

CSREES NPLs and staff frequently communicate with partners and key stakeholders via phone and in person on the importance of timely reporting of outcomes data. To encourage such reporting NPLs may include under “Selected Results and Impacts” a statement about a particular project on a Nutrition and Health related CSREES web page (i.e. Health; Obesity and Healthy Weight). This also provides a venue for sharing information to wider and more diverse audiences.

To improve the ability to collect a variety of data from a number of different project funding mechanisms (NRI, Multistate, EFNEP, Formula funds) related to the Nutrition Portfolio in a timely manner, CSREES nutrition staff have been responsive to CSREES “One Solution” requests for input and feedback as this project’s development moves forward.

Stakeholders are in a unique position to inform CSREES of their needs and interests and CSREES has made painstaking efforts to develop mechanisms for soliciting and implementing input. This

effort helps ensure that stakeholders appreciate their value in the partnership. Additionally CSREES is in a position to be a conduit of current research information. CSREES works closely with other agencies, organizations and the Land Grant Universities and provides a mechanism to distributes information to stakeholders and partners. Listservs provide an excellent means for systematic distribution of materials.

3.4 Agency Guidance

The panel focused on leadership within the unit to develop a score and recommendations related to this performance dimension. The panel observed strong evidence of leadership within the CSREES Families, 4H and Nutrition unit. Given constraints in financial and other resources, the guidance from unit leaders has been strong in providing guidance and directing the unit's activities related to the goals of this portfolio.

Recommendations

The panel recommends that the unit examine options to strengthen its emphasis on integration. For example, a nutrition team leader could be identified for each mission area (R, E and E) and that person could take the lead in coordinating communication within the unit and with its major partners.

The panel recognizes that its relatively new partnership arrangement with Baylor is an innovative and potentially productive way of coordinating expertise and communication on MCH, an important topic area for CSREES and this unit. The panel recommends that this unit assess the effectiveness of this model to determine its potential application in other topic areas such as nutrition and aging.

Actions

Since the external review of the nutrition portfolio, there has been a change in the administrative team of Families, 4-H, and Nutrition. Dr. Cynthia Tuttle now serves as the Director of Nutrition and Family Sciences, one of the two groups within Families, 4-H, and Nutrition. Dr. Mary McPhail Gray has worked on developing a strategic plan and mission for the unit. During spring 2006 much emphasis was placed on planning for integration within the unit and discussing future employment directions. This impetus is being continued in 2007 with plans for a strategic retreat and further delineation of strategies to work with emerging issues. Since 70 percent of the nutrition portfolio team are part of Families, 4-H, and Nutrition unit, much of the planning and decision-making that occurs has implications for the nutrition portfolio. At this time, the panel recommendation that there be a nutrition team leader for each mission area is not under active consideration. Instead there is an increased emphasis on strengthening and enhancing the linkages of the three areas within project or programs to maximize financial resources.

Although the partnership arrangement with the Baylor College of Medicine, the Agricultural Research Service and the Children's Nutrition Research Center has provided benefits to all constituents and has encouraged the cross-fertilization of research ideas and extension outreach, no formal evaluation has been executed.

3.5 Portfolio Accountability

A nationwide review of CES proposals for FSNE and several site visits were conducted recently to provide feedback and follow-up training to improve quality of plans and reports.

Recommendations

The panel recommends that members of this unit continue and expand their efforts to review state plans and reports for nutrition-related activities, beginning with the 2005 annual reports.

This report has limited information on the outcomes of formula-funded activities. If the challenging charge of collecting and reporting aggregated data on these important activities and communicating their value to partners and stakeholders, it will strengthen the basis of future congressional support. If CSREES cannot more effectively capture evidence of impact of formula funds, there is a risk that resources will be redirected to competitive funding. This would result in permanent and severe loss of valuable infrastructure for delivering quality programs and coordinating long-term relationships.

Actions

CSREES requires annual Plans of Work and Progress Reports from land-grant universities which are reviewed by CSREES state liaisons. Members of the nutrition portfolio team serve as liaisons to eight states. Although continued efforts are being made to strengthen the accessibility of data collected by the states to specifically determine the impact, at this time it is difficult to obtain all of the data suggested and evaluate outcomes and impact. Ideally it will be easier to aggregate statewide data in the future.

IV. Summary

Although there have been a number of success stories that could be described for the year 2006, the following three examples were selected to showcase our work with research, extension and education.

RESEARCH: Scientists funded through the CSREES NRI Bioactive Food Components for Optimal Health and Human Nutrition and Obesity programs presented results from 26 projects at the Experimental Biology 2007 conference held April 28-May 2 in Washington, DC. (Note: Much of the work leading to these projects was conducted during 2006.) The conference brought together more than 12,000 biological and biomedical scientists from dozens of different disciplines, throughout the United States and the world. Experimental Biology incorporates the annual meetings of six sponsoring societies, including the American Society for Nutrition. Also attending the conference were CSREES National Program Leaders Drs. Etta Saltos, Susan Welsh, and Shirley Gerrior. CSREES National Program Leader Dr. Marilyn Swanson provided resource material for the Agricultural Research Service exhibit which was visited by over 500 attendees.

EXTENSION: In FY06 the Expanded Food and Nutrition Education Program successfully reached 149,973 adults, 380,538 youth* and an additional 541,812 family members indirectly. Impacts include:

For Adults –

- 91% Improved their dietary intake, including an increase of about 1.4 servings per day of fruits and vegetables

- 88% Improved in one or more nutrition practice
- 83% Improved in one or more food resource management practice
- 65% Improved in one or more food safety practice

For Youth* –

- 71% Now eat a variety of foods
- 71% Increased their knowledge of essentials of human nutrition
- 64% Improved practices in food preparation and safety
- 61% Increased their ability to select low-cost nutritious foods

Additional impact is posted at www.csrees.usda.gov/nea/food/efnep/impacts.html

**Youth data not yet finalized for FY06 – may increase by as many as 400 youth*

EDUCATION: Nutrigenomics, the applied use of genomics and biotechnology to study nutrition as it relates to nutrient-gene, can reveal the connection between nutrition and health. Understanding how the interactions between nutrients and genes regulate disease pathways and health may ultimately provide nutritionists and healthcare professionals with the ability to create an optimal diet for the greater public or diets specifically designed for individuals based upon their individual genetic make-up. Since nutrigenomics is comprised of many new and high technology disciplines there is a great demand for collaboration, training and education in this growing field. Educators at the University of Arizona have received CSREES funding to develop online courses that incorporate the new biotechnologies. The formal online courses are being developed with a virtual laboratory to give students practical experience and training in this field. Because these online courses are modular, it can be easily incorporated into existing curricula and will maximize teaching efforts and reach a very large number of students, economically and efficiently.

The nutrition portfolio team has been energized reviewing and reflecting on the actions that have occurred in 2006 and how they relate to recommendations from the external portfolio review. Most notably have been the closer collaboration and the sharing of expertise among all national program leaders as well as changes in personnel and structure of the CSREES units involved. (Refer to criteria 3.4, agency guidance for details.)

There has been an effort to look at obesity prevention and health promotion with a greater recognition of the diversity of interrelated factors. The nutrition portfolio team has reflected on the need for articulating impacts of programs recognizing that this is a continual task as programs evolve. Ideally some of the technological changes in reporting impacts such as One Solution/CIS will make this an easier task.

Justification of score increase

The first internal annual review score for Nutrition and Healthier Food Choices Portfolio was 90. This compares to the score of _86__provided by the external review team in spring 2006. The increase in the score is justified by statements made by the National Program Leaders as follows:

Scope: increased from 2 to 2.5

Rationale: The internal review team felt that an increase from 2 to 2.5 was warranted due to the diligent efforts of all involved to address some of the specific issues noted by the external review team as well as the concentrated efforts made by those impacted by the 2006 nutrition portfolio to be cognizant of and relate to emerging trends. For example, one of the external review team's recommendations was to target older adults. Both older adults and adults of any age are the target of nineteen current NRI competitively funded projects. In addition there is one Multistate Research

Fund project which specifically addresses older Americans. In addition there has been an increasing realization of the need to better integrate programs. EFNEP is an excellent example where this has been manifested.

Comprehensiveness: increased from 2 to 2.5

Rationale: The internal review team took special notice of the preliminary discussions towards a more comprehensive and holistic approach to programmatic efforts. Although the internal review team acknowledged that the final target has not yet been met, it felt that the significant efforts in the area of comprehensive programming should be acknowledged.